

**REMARKS**

This Amendment responds to the Office Action dated November 29, 2004, in which the Examiner objected to the drawings, rejected claims 9, 12, 13 and 19 under 35 U.S.C. §112, second paragraph, rejected claims 1, 2, 10-11 and 14-15 under 35 U.S.C. §102(b) and objected to claims 3-8, 17 and 20 as being dependent upon a rejected base claim but would be allowable if rewritten in independent form.

As indicated above, reference numeral 20 has been added to the specification. Therefore, applicants respectfully request the Examiner withdraws the objection to the drawings.

As indicated above, claims 9, 12, 13 and 19 have been amended in order to correct minor informalities. Applicants respectfully submit that the amendment does not narrow the literal scope of the claims. Therefore, applicants respectfully request the Examiner withdraws the rejection to claims 9, 12, 13 and 19 under 35 U.S.C. §112, second paragraph.

As indicated above, claims 1 and 14 have been amended to make explicit what is implicit in the claim. The amendment is unrelated to a statutory requirement for patentability.

Claim 1 claims a radiation therapy device, and claim 14 claims a method of changing spatial dose distribution. The device and method comprise a source carrier arrangement carrying radioactive sources; and a collimator body comprising collimator passages for directing radiation emanating from the sources toward a substantially common focus. Each collimator passage has an inlet for receiving the radiation. A subset of the sources is linearly displaceable relatively to a subset of the collimator passage inlets, or vice versa, from a first relative position, in which

radiation from the subset of sources is received by a first plurality of inlets of the subset of collimator passage inlets, to a second relative position, in which radiation from the subset of sources is received by a second plurality of inlets of the subset of collimator passage inlets, thereby enabling a change of spatial dose distribution surrounding the focus.

Through the structure and method of the claimed invention linearly displacing a subset of sources relative to a subset of collimator passage inlets between first and second relative positions, as claimed in claims 1 and 14, the claimed invention provides a radiation therapy device while being able to choose different spatial dose distributions. The prior art does not show, teach or suggest the invention as claimed in claims 1 and 14.

Claims 1, 2, 10, 11, 14 and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by *Rousseau et al* (U.S. Patent No. 6,044,126).

*Rousseau et al* appears to disclose radiation therapy for small brain lesions by means of a device making use of a helmet to which can be fitted a plurality of interchangeable, static collimators focused on one and the same irradiation isocenter. (col.1, lines 10-14) With reference to FIG. 1, a stereotactic radiosurgery device for the treatment of cerebral lesions (arteriovenous malformations or tumors), corresponding to the static technique, includes a plurality of sources, 1, of ionizing radiation, which are arranged, statically, on a hemispherical device, 2, housed inside a shielded cavity, 3, forming a radiation shield, and a helmet, 5, designed to be received inside hemispherical device 2. The latter comprises, for each source 1, a primary collimator, 4, communicating with source 1. Helmet 5 is designed to carry a plurality of isocentric secondary collimators,  $C_i$ , which are interchangeable, and

which, once helmet 5 is housed inside hemispherical device 2, take up positions respectively facing primary collimators 4. Once helmet 5 is in position inside hemispherical device 2, sources 1 emit ionizing radiation in the form of a plurality of mini-beams which are collimated by primary collimators 4 and secondary collimators  $C_f$ , and which are centered on one and the same irradiation isocenter. Before helmet 5 is placed on the skull of a patient, a stereotactic frame (not shown) is fitted to the patient in the usual way, this frame making it possible, in an initial stage, to locate, in the mechanical reference system of the radiosurgery device, the intracranial target volume to be treated, using a suitable medical imaging modality. This can involve, for example, X-ray angiography, in the case of arteriovenous malformations, and Computed Tomography or Magnetic Resonance Imaging, in that of tumoral lesions. In a second stage, with the patient lying on table 6 of the radiosurgery device, the stereotactic frame is used to position the patient's skull in relation to helmet 5, in such a way that the irradiation isocenter is centered on a predetermined target point on the target volume to be treated. Once this positioning operation has been completed, the radiosurgery helmet 5 fixed to the patient's skull is translated in the direction of hemispherical device 2, until helmet 5 is in position inside hemispherical device 2. (col. 4, lines 20-56)

Thus, *Rousseau et al* merely discloses translating a helmet 5 fixed to a patient's skull in a direction of hemispherical device 2 until the helmet 5 is positioned inside the hemispherical device 2. Thus, nothing in *Rousseau et al* shows, teaches or suggests linearly displacing sources, relative to collimator passage inlets from a first relative position, in which radiation from the sources is received by a first plurality of inlets of the collimator passages, to a second relative position in which

radiation from the sources is received by a second plurality of inlets of the collimator passage inlets as claimed in claims 1 and 14. Rather, *Rousseau et al* merely discloses moving a patient, which is connected to a collimator body, from a position outside the radiation therapy device to a position inside the radiation therapy device.

Since nothing in *Rousseau et al* shows, teaches or suggests translating the sources relative to the collimator passage inlets from a first relative position in which radiation from the sources is received by a first plurality of inlets of the collimator passages to a second relative position in which radiation from the sources is received by a second plurality of inlets of the collimator passages as claimed in claims 1 and 14, applicants respectfully request the Examiner withdraws the rejection to claims 1 and 14 under 35 U.S.C. §102(b).

Claims 2, 10, 11 and 15 depend from claims 1 and 14 and recite additional features. Applicants respectfully submit that claims 2, 10, 11 and 15 would not have been anticipated by *Rousseau et al* within the meaning of 35 U.S.C. §102(b) at least for the reasons as set forth above. Therefore, applicants respectfully request the Examiner withdraws the rejection to claims 2, 10, 11 and 15 under 35 U.S.C. §102(b).

Since objected to claims 3-8, 17 and 20 depend from allowable claims, applicants respectfully request the Examiner withdraws the objection thereto.

New claims 21-22 have been added and recite additional features. Applicants respectfully submit that these claims are also in condition for allowance.

The prior art of record, which is not relied upon, is acknowledged. The references taken singularly or in combination do not anticipate or make obvious the claimed invention.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

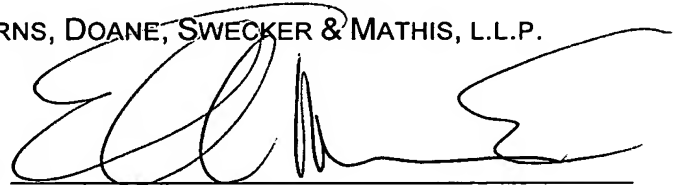
In the event that this paper is not timely filed within the currently set shortened statutory period, applicants respectfully petition for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

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Respectfully submitted,

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